

## REMARKS

The Examiner has:

I. Rejected Claims 1-5 under 35 U.S.C. Section 102(b)

We disagree. However, without acquiescing to the Examiner's rejections, but to further the prosecution, and hereby expressly reserving the right to prosecute the original (or similar) claims, Applicant has amended Claim 1.

### **I. The Claims Are Not Anticipated**

The Examiner has rejected Claims 1-5 under 35 U.S.C. Section 102(b) as allegedly anticipated by U.S. Patent 5,118,800 to Smith et al. (hereinafter "Smith"). We disagree. In any case, without acquiescing to the Examiner's rejections, but to further the prosecution, and hereby expressly reserving the right to prosecute the original (or similar) claims, Applicant has amended Claim 1 to recite the limitation that the solid support comprises a long-chain alkyl amine (as supported in the specification, page 19 lines 17-18), that the FMOC group is on the nucleotide base (See Example I, pages 12-13), and that the treating of said oligonucleotide support is with DBU, i.e., 1,8-diazabicyclo[5.4.0]undec-7-ene (See Example I.E., page 14, lines 1-10). Since Smith does not identically describe each and every element of the claim, it is not a proper 102 reference. *Atlas Powder v. E.I. duPont*, 224 U.S.P.Q. 409 (Fed. Cir. 1984). Smith teaches the use of 9-fluorenylmethoxycarbonyl protective groups solely for amine groups located on the ribose (sugar) moiety, not the nucleoside base. Smith does not disclose an amine-protecting group like the 9-fluorenylmethoxycarbonyl on the deoxyguanosine base of the nucleoside.

In addition, we believe that the added limitations would not render the claimed embodiments obvious to one skilled in the art. First, the applicant would like to point out that the claimed method is related to "immobilized" oligonucleotides. At the time of filing the application, producing oligonucleotide in on a solid support, thus **immobilized**, that **do not contain protecting groups** was not a straightforward task. For example, in Graur et al., (Indian Journal of Chemistry 29B, pp. 108-112 (1990), hereinafter "Graur" See Attachment A, an IDS is forthcoming) the authors specifically mention that they were not able to utilize phosphoramidite

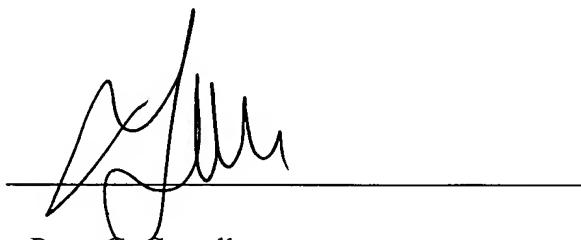
of 2'-deoxyguanosine (2'-dG) under the conditions investigated (see page 108, column 2, last paragraph). As mentioned in the Applicant's specification and evidence by the failure of Graur, FMOC deprotection of the 2'-dG is problematic using standard protocols and is not easily adaptable to high throughput synthesis (see page 28 lines 4-30, and page 14, lines 1-10). The applicants discovered that utilization of a solid support having a long-chain alkyl amine and using DBU in removing FMOC was unexpectedly superior in overcoming these shortcomings.

**CONCLUSION**

Applicant respectfully requests that the Examiner's rejections under 35 U.S.C. § 102(b) be withdrawn and that the pending Claims be allowed. Should the Examiner believe a telephone interview would aid in the prosecution of this application, the Applicant encourages the Examiner to call the undersigned at 617.984.0616.

Respectfully submitted,

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